CLAIMS

1. A pin mirror cutter comprising:

a first tip mounting seat formed in a peripheral face of a substantially annular cutter body which rotates around an axis; and

a second tip mounting seat formed in an end face of the cutter body,

wherein a throw-away tip in which cutting edges are formed at intersecting ridgeline parts between a pair of oppositely disposed side faces of a substantially trapezoidal flat-plate-shaped tip body and upper and lower faces of the tip body is mounted on the first tip mounting seat such that a thickness direction of the tip body is approximately aligned with a radial direction of the cutter body to provide cutting edges formed in acute corner parts of the tip body for cutting, and

wherein the throw-away tip is mounted on the second tip mounting seat such that the thickness direction of the tip body is approximately aligned with an axial direction of the cutter body to provide cutting edges formed in obtuse corner parts of the tip body for cutting.

2. A throw-away tip comprising:

cutting edges formed at intersecting ridgeline parts between a pair of oppositely disposed side faces of a substantially trapezoidal flat-plate-shaped tip body, and upper and lower faces of the tip body.

3. A pin mirror cutter comprising:

an adaptor mounted on a processing machine; and

a substantially annular cutter body which is attached to the adaptor and rotates around an axis,

wherein the cutter body is formed with a substantially annular flange part which protrudes in a radial direction of the cutter body from a substantially entire periphery of a

peripheral face of the cutter body, and the adaptor is formed with a substantially annular stepped part which is recessed in the radial direction of the cutter body from a substantially entire periphery of a peripheral face of the adaptor and receives the flange part, and

wherein, with the cutter body attached to the adaptor, the flange part and the stepped part are brought into surface contact with each other such that they overlap each other in the radial direction of the cutter body, and a radial length of the cutter body in this contact surface is set to be in a range of 0.1D to 1.0D where D refers to a thickness of the cutter body.

4. The pin mirror cutter according to Claim 3,

wherein the cutter body is formed with a plurality of protruding parts which protrude in the radial direction of the cutter body from the peripheral face of the cutter body, and the adaptor is formed with a plurality of notched parts which are recessed in the radial direction of the cutter body from the peripheral face of the adaptor,

wherein, with the cutter body attached to the adaptor, the plurality of protruding parts are fitted into the plurality of notched parts, respectively, whereby the cutter body is fixed to the adaptor in the peripheral direction, and the axis of the cutter body is approximately aligned with an axis of the adaptor.

5. A pin mirror cutter comprising:

an adaptor mounted on a processing machine; and

a substantially annular cutter body which is attached to this adaptor and rotates around an axis,

wherein the cutter body is formed with a substantially annular flange part which protrudes in a radial direction of the cutter body from a substantially entire periphery of a peripheral face of the cutter body, and the adaptor is formed with a substantially annular stepped part which is recessed in the radial direction of the cutter body from a substantially entire

periphery of a peripheral face of the adaptor and receives the flange part, and

wherein one of a wall surface of the flange part which faces the stepped part and a wall surface of the stepped part which faces the flange part is formed with a salient which protrudes in the axial direction of the cutter body, and the other wall surface is formed with a recessed part which is recessed in the axial direction of the cutter body to allow the salient to fit the recessed part.

6. The pin mirror cutter according to Claim 5,

wherein the salient is formed such that a distance between a pair of side faces of the salient, which faces a peripheral direction, becomes small toward a protruding direction of the salient, and the recessed part is formed such that a distance between a pair of side faces of the recessed part, which faces the peripheral direction, becomes small toward a recessed direction of the recessed part.